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* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	DEC 21	IPC search and display fields enhanced in CA/CAplus with the IPC reform
NEWS 4	DEC 23	New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/ USPAT2
NEWS 5	JAN 13	IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 6	JAN 13	New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to INPADOC
NEWS 7	JAN 17	Pre-1988 INPI data added to MARPAT
NEWS 8	JAN 17	IPC 8 in the WPI family of databases including WPIFV
NEWS 9	JAN 30	Saved answer limit increased
NEWS 10	JAN 31	Monthly current-awareness alert (SDI) frequency added to TULSA
NEWS 11	FEB 21	STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results
NEWS 12	FEB 22	Status of current WO (PCT) information on STN
NEWS 13	FEB 22	The IPC thesaurus added to additional patent databases on STN
NEWS 14	FEB 22	Updates in EPFULL; IPC 8 enhancements added
NEWS 15	FEB 27	New STN AnaVist pricing effective March 1, 2006
NEWS 16	FEB 28	MEDLINE/LMEDLINE reload improves functionality
NEWS 17	FEB 28	TOXCENTER reloaded with enhancements
NEWS 18	FEB 28	REGISTRY/ZREGISTRY enhanced with more experimental spectral property data
NEWS 19	MAR 01	INSPEC reloaded and enhanced
NEWS 20	MAR 03	Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 21	MAR 08	X.25 communication option no longer available after June 2006
NEWS 22	MAR 22	EMBASE is now updated on a daily basis
NEWS 23	APR 03	New IPC 8 fields and IPC thesaurus added to PATDPAFULL
NEWS 24	APR 03	Bibliographic data updates resume; new IPC 8 fields and IPC thesaurus added in PCTFULL
NEWS 25	APR 04	STN AnaVist $500 visualization usage credit offered

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
http://download.cas.org/express/v8.0-Discover/

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* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 09:38:17 ON 09 APR 2006

=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?
Choice (Y/n):
Switching to the Registry File...
Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 09:38:37 ON 09 APR 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 APR 2006 HIGHEST RN 879544-24-8
DICTIONARY FILE UPDATES: 6 APR 2006 HIGHEST RN 879544-24-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

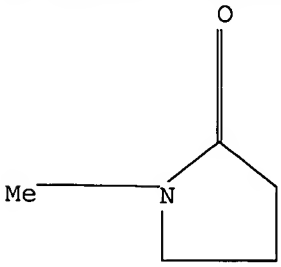
****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

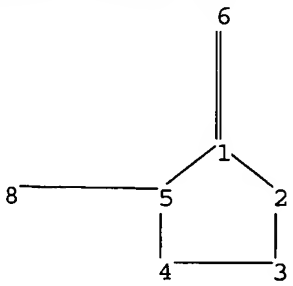
Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\10791982.str



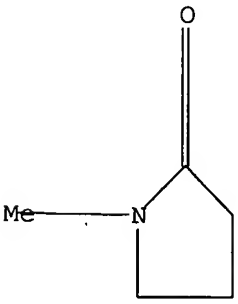


chain nodes :
6 8
ring nodes :
1 2 3 4 5
chain bonds :
1-6 5-8
ring bonds :
1-2 1-5 2-3 3-4 4-5
exact/norm bonds :
1-5 1-6 4-5
exact bonds :
1-2 2-3 3-4 5-8
isolated ring systems :
containing 1 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 8:CLASS

L1 STRUCTURE UPLOADED

=> D L1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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=> S L1
SAMPLE SEARCH INITIATED 09:38:49 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    14935 TO ITERATE

 13.4% PROCESSED     2000 ITERATIONS                          48 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       291381 TO   306019
PROJECTED ANSWERS:            6033 TO     8303

L2          48 SEA SSS SAM L1

=> S L1 SSS FULL
FULL SEARCH INITIATED 09:38:56 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   301477 TO ITERATE

100.0% PROCESSED   301477 ITERATIONS                      6074 ANSWERS
SEARCH TIME: 00.00.02

L3          6074 SEA SSS FUL L1

=> FIL HCAPLUS
COST IN U.S. DOLLARS                        SINCE FILE      TOTAL
                                               ENTRY     SESSION
FULL ESTIMATED COST                           166.94      167.15

FILE 'HCAPLUS' ENTERED AT 09:39:04 ON 09 APR 2006
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE COVERS 1907 - 9 Apr 2006  VOL 144 ISS 16
FILE LAST UPDATED: 7 Apr 2006  (20060407/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> S L3
```

L4 16625 L3

=> S L4 AND ALUMINA
279219 ALUMINA
2515 ALUMINAS
279493 ALUMINA
(ALUMINA OR ALUMINAS)
L5 188 L4 AND ALUMINA

=> S L5 AND ISOBUTYLENE
19192 ISOBUTYLENE
112 ISOBUTYLENES
19230 ISOBUTYLENE
(ISOBUTYLENE OR ISOBUTYLENES)
L6 2 L5 AND ISOBUTYLENE

=> S L5 AND BUTYL ALCOHOL
260123 BUTYL
33 BUTYLS
260137 BUTYL
(BUTYL OR BUTYLS)
234920 ALCOHOL
161475 ALCOHOLS
366587 ALCOHOL
(ALCOHOL OR ALCOHOLS)
568518 ALC
188446 ALCS
664591 ALC
(ALC OR ALCS)
798008 ALCOHOL
(ALCOHOL OR ALC)
15854 BUTYL ALCOHOL
(BUTYL(W)ALCOHOL)
L7 0 L5 AND BUTYL ALCOHOL

=> S L5 AND PURIFYING
34787 PURIFYING
L8 2 L5 AND PURIFYING

=> S L5 AND PROCESS
2225288 PROCESS
1503336 PROCESSES
3320173 PROCESS
(PROCESS OR PROCESSES)
L9 72 L5 AND PROCESS

=> S L5 AND METHOD
3063104 METHOD
1257261 METHODS
3966482 METHOD
(METHOD OR METHODS)
L10 56 L5 AND METHOD

=> S L10 AND P/DT
5176112 P/DT
L11 45 L10 AND P/DT

=> S L11 AND US/PC
1524931 US/PC

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L12          19 L11 AND US/PC

=>

=> D HIS

     (FILE 'HOME' ENTERED AT 09:38:17 ON 09 APR 2006)

     FILE 'REGISTRY' ENTERED AT 09:38:37 ON 09 APR 2006
L1              STRUCTURE UPLOADED
L2            48 S L1
L3          6074 S L1 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 09:39:04 ON 09 APR 2006
L4         16625 S L3
L5           188 S L4 AND ALUMINA
L6             2 S L5 AND ISOBUTYLENE
L7             0 S L5 AND BUTYL ALCOHOL
L8             2 S L5 AND PURIFYING
L9            72 S L5 AND PROCESS
L10           56 S L5 AND METHOD
L11           45 S L10 AND P/DT
L12           19 S L11 AND US/PC

=> d l6 ibib abs hitstr tot

L6   ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         2005:985345  HCAPLUS
DOCUMENT NUMBER:          143:288367
TITLE:                    Method for purifying N-methyl-2-pyrrolidone by
                          treatment with an alumina adsorbent
INVENTOR(S):              Kahn, Andrew P.; Weir, Thomas W.
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 5 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    -------------------      --------
     US 2005197502         A1    20050908    US 2004-791982           20040303
     WO 2005092851         A1    20051006    WO 2005-US3202           20050203
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
             SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:                        US 2004-791982      A  20040303
AB   A method for purifying N-methyl-2-pyrrolidone (I) comprises treating the I
     with an alumina that desorbs <100 μmol/g of
     isobutylene between 225-400° in a standard tert-Bu alc.
```
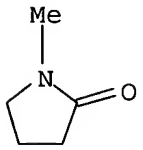

dehydration test. The method enables the removal of at least about 80% of amine impurities or ≥60% of the APHA color from the I at 4 bed vols. treated.

IT **872-50-4P**, NMP, preparation
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(method for purifying N-methyl-2-pyrrolidone by treatment with an **alumina** adsorbent)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



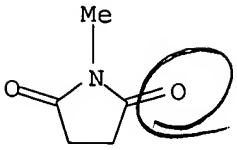
L6 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:609683 HCAPLUS
DOCUMENT NUMBER: 127:285874
TITLE: Simulated photographic-quality prints using plasticizer to reduce curl
INVENTOR(S): Malhotra, Shadi L.
PATENT ASSIGNEE(S): Xerox Corp., USA
SOURCE: U.S., 20 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5665504	A	19970909	US 1996-584784	19960111
JP 09281737	A2	19971031	JP 1997-1317	19970108

PRIORITY APPLN. INFO.: US 1996-584784 A 19960111

AB Simulated photog.-quality prints are created using nonphotog. imaging such as xerog. and ink-jet printing. Reverse or wrong reading toner images are formed on a transparent substrate which is adhered to a coated backing sheet. The backing sheet is coated with a polymer material which serves as an adhesive and has a glass transition temperature less than 55°. A hydrophilic polymer coating having a m.p. greater than 50° and a toner plasticizer having a m.p. less than 75° contacting the adhesive polymer serves as a wetting agent for providing an enhanced optical interface as well as protection for the adhesive polymer which has a lower m.p. than the adhesive polymer.

IT **1121-07-9**, N-Methylsuccinimide
RL: TEM (Technical or engineered material use); USES (Uses)
(simulated photog.-quality prints containing)
RN 1121-07-9 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-methyl- (9CI) (CA INDEX NAME)



=> d l8 ibib abs hitstr tot

L8 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:985345 HCAPLUS
DOCUMENT NUMBER: 143:288367
TITLE: Method for **purifying** N-methyl-2-pyrrolidone by treatment with an **alumina** adsorbent
INVENTOR(S): Kahn, Andrew P.; Weir, Thomas W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 5 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

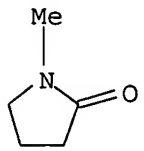
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005197502	A1	20050908	US 2004-791982	20040303
WO 2005092851	A1	20051006	WO 2005-US3202	20050203

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-791982 A 20040303

AB A method for **purifying** N-methyl-2-pyrrolidone (I) comprises treating the I with an **alumina** that desorbs <100 μmol/g of isobutylene between 225-400° in a standard tert-Bu alc. dehydration test. The method enables the removal of at least about 80% of amine impurities or ≥60% of the APHA color from the I at 4 bed vols. treated.

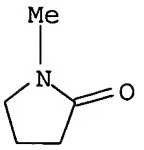
IT **872-50-4P**, NMP, preparation
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(method for **purifying** N-methyl-2-pyrrolidone by treatment with an **alumina** adsorbent)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L8 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:182557 HCAPLUS
DOCUMENT NUMBER: 130:238303
TITLE: Purification of N-methyl-2-pyrrolidone as solvents for vinylidene fluoride polymers
INVENTOR(S): Horii, Masatoshi; Furukawa, Hiroshi; Inagaki, Hiroyuki; Tanba, Tadashi
PATENT ASSIGNEE(S): Tonen Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11071346	A2	19990316	JP 1997-249622	19970829

PRIORITY APPLN. INFO.: JP 1997-249622 19970829
AB Title compound is purified by treating with acidic compds. or porous compds. Thus, N-methyl-2-pyrrolidone was neutralized with p-MeC6H4SO3H and distilled to give N-methyl-2-pyrrolidone, whose solution of poly(vinylidene fluoride) showed Gardner color number 1, vs. number 18 for the untreated solvent.
IT **872-50-4P**, N-Methyl-2-pyrrolidone, preparation
RL: NUU (Other use, unclassified); PUR (Purification or recovery); PREP (Preparation); USES (Uses)
(purification of methylpyrrolidone as solvents for vinylidene fluoride polymers)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



=> d l12 ibib abs hitstr tot

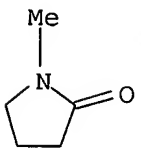
L12 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1310054 HCAPLUS
DOCUMENT NUMBER: 144:57512
TITLE: Non-aqueous formulations containing biodegradable polymers and methionine and solvents for removing peroxides and reducing the oxidative degradation of drugs

INVENTOR(S): Fereira, Pamela J.; Desjardin, Michael A.; Rohloff, Catherine M.; Berry, Stephen A.; Zlatkova-Karaslavova, Ekaterina S.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 36 pp., Cont.-in-part of U.S. Ser. No. 814,826.
CODEN: USXXCO
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005276856	A1	20051215	US 2005-183477		20050718 <--
US 2005008661	A1	20050113	US 2004-814826		20040331 <--
PRIORITY APPLN. INFO.:			US 2003-459300P	P	20030331
			US 2004-814826	A2	20040331

AB The present invention is related to materials and **methods** for forming polymeric delivery vehicles that reduces risk of oxidative degradation of a carried drug and the resulting compns. For example, stability of ω-IFN was improved by adding L-methionine into PVP to remove peroxides.

IT **872-50-4**, n-Methylpyrrolidone, uses
RL: NUU (Other use, unclassified); USES (Uses)
(non-aqueous formulations containing biodegradable polymers and methionine and solvents for removing peroxides and reducing oxidative degradation of drugs)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L12 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:985345 HCAPLUS
DOCUMENT NUMBER: 143:288367
TITLE: **Method** for purifying N-methyl-2-pyrrolidone by treatment with an **alumina** adsorbent
INVENTOR(S): Kahn, Andrew P.; Weir, Thomas W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 5 pp.
CODEN: USXXCO
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005197502	A1	20050908	US 2004-791982	20040303 <--
WO 2005092851	A1	20051006	WO 2005-US3202	20050203

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

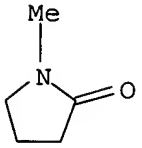
PRIORITY APPLN. INFO.: US 2004-791982 A 20040303

AB A **method** for purifying N-methyl-2-pyrrolidone (I) comprises treating the I with an **alumina** that desorbs <100 μmol/g of isobutylene between 225-400° in a standard tert-Bu alc. dehydration test. The **method** enables the removal of at least about 80% of amine impurities or ≥60% of the APHA color from the I at 4 bed vols. treated.

IT **872-50-4P**, NMP, preparation
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(**method** for purifying N-methyl-2-pyrrolidone by treatment with an **alumina** adsorbent)

RN 872-50-4 HCAPLUS

CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L12 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:905472 HCAPLUS

DOCUMENT NUMBER: 141:382158

TITLE: **Method** of fabrication of single ion conductor-containing composite polymer electrolyte for lithium secondary battery

INVENTOR(S): Lee, Young Gi; Ryu, Kwang Sun; Chang, Soon Ho

PATENT ASSIGNEE(S): S. Korea

SOURCE: U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO

DOCUMENT TYPE: **Patent**

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 2004214089	A1	20041028	US 2003-750152	20031230	<--
JP 2004327423	A2	20041118	JP 2003-435912	20031226	
CN 1610170	A	20050427	CN 2003-10125473	20031230	
US 2005196677	A1	20050908	US 2005-97730	20050401	<--

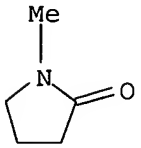
PRIORITY APPLN. INFO.: KR 2003-26420 A 20030425
US 2003-750152 A2 20031230
KR 2004-28470 A 20040424

AB Provided is a composite polymer electrolyte for a lithium secondary

battery that includes a composite polymer matrix structure having a single ion conductor-containing polymer matrix to enhance ionic conductivity and a **method** of manufacturing the same. The composite polymer electrolyte includes a first polymer matrix made of a first porous polymer with a first pore size; a second polymer matrix made of a single ion conductor, an inorg. material, and a second porous polymer with a second pore size smaller than the first pore size. The second polymer matrix is coated on a surface of the first polymer matrix. The composite polymer matrix structure can increase mech. properties. The single ion conductor-containing porous polymer matrix of a submicro-scale can enhance ionic conductivity and the charge/discharge cycle stability.

IT **872-50-4**, n-Methylpyrrolidone, uses
RL: MOA (Modifier or additive use); USES (Uses)
(**method** of fabrication of single ion conductor-containing composite polymer electrolyte for lithium secondary battery)

RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L12 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:905471 HCAPLUS
DOCUMENT NUMBER: 141:382157
TITLE: **Method** of fabrication of composite polymer electrolyte of different morphologies for lithium secondary battery
INVENTOR(S): Lee, Young Gi; Kim, Kwang Man; Ryu, Kwang Sun; Chang, Soon Ho
PATENT ASSIGNEE(S): S. Korea
SOURCE: U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

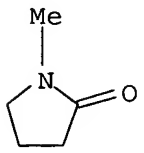
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004214088	A1	20041028	US 2003-748363	20031229 <--
JP 2004327422	A2	20041118	JP 2003-431458	20031225
CN 1610169	A	20050427	CN 2003-10125472	20031231
PRIORITY APPLN. INFO.:			KR 2003-26419 A	20030425

AB A composite polymer electrolyte for a lithium secondary battery and a **method** of manufacturing the same are provided. The composite polymer electrolyte includes a composite film structure which includes a first porous polymer film with good mech. properties and a second porous polymer film with submicro-scale morphol. of more compact porous structure than the first porous polymer structure, coated on a surface of the first porous polymer film, and an electrolyte solution impregnated into the composite film structure. The different morphologies of the composite film structure enable to an increase in mech. properties and ionic conductivity

Furthermore, the charge/discharge cycle performance and stability of a lithium metal polymer secondary battery are enhanced.

IT **872-50-4**, n-Methylpyrrolidone, uses
RL: MOA (Modifier or additive use); USES (Uses)
(**method** of fabrication of composite polymer electrolyte of different morphologies for lithium secondary battery)

RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



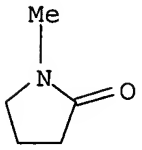
L12 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:414719 HCAPLUS
DOCUMENT NUMBER: 140:416900
TITLE: Porous inorganic/organic homogeneous copolymeric hybrid materials for chromatographic separations, and process for the preparation thereof
INVENTOR(S): Jiang, Zhiping; O'Gara, John E.; Fisk, Raymond P.; Wyndham, Kevin D.; Brousmiche, Darryl W.
PATENT ASSIGNEE(S): Waters Investments Limited, USA
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041398	A2	20040521	WO 2003-US34776	20031030
WO 2004041398	A3	20041229		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
GB 2414993	A1	20051214	GB 2005-8751	20031030
JP 2006504854	T2	20060209	JP 2004-550384	20031030
US 2005230298	A1	20051020	US 2005-119111	20050429 <--
PRIORITY APPLN. INFO.:			US 2002-422580P P	20021030
			WO 2003-US34776 W	20031030

AB The present invention relates to porous inorg./organic homogeneous copolymeric hybrid material materials, including particulates and monoliths, **methods** for their manufacture, and uses thereof, e.g., as chromatog. sepns. materials.

IT **872-50-4**, 1-Methyl-2-pyrrolidinone, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)

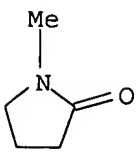
(porogen; porous inorg./organic homogeneous copolymeric hybrid materials as stationary phases for chromatog. sepns. and process for their preparation)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L12 ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:372705 HCAPLUS
DOCUMENT NUMBER: 140:371446
TITLE: Devices and **methods** for holding a biopolymeric array
INVENTOR(S): Parker, Russell A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 28 pp.
CODEN: USXXCO
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004086874	A1	20040506	US 2002-286649	20021031 <--
PRIORITY APPLN. INFO.:			US 2002-286649	20021031

AB Devices and **methods** for holding at least one array are provided. The subject devices are characterized by having a housing having at least one array therein and an absorbing material associated with the housing that is capable of absorbing mols. within the housing deleterious to the array(s) held therein. The seal may be resealable and/or may be a hermetic seal. The subject **methods** include packaging at least one array in a subject array holding device. Also provided are **methods** for using an array that is held in a subject array holding device in an array assay. Kits for use in the subject **methods** are also provided.
IT **872-50-4**, uses
RL: DEV (Device component use); USES (Uses)
(devices and **methods** for holding biopolymeric array)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



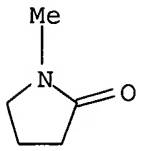
L12 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:1007141 HCAPLUS
DOCUMENT NUMBER: 140:37992
TITLE: Membranes impregnated with cross-linked enzyme crystals and use for removal of uremic toxins from dialysate
INVENTOR(S): Tandon, Rahul; Karoor, Sujatha; Pauley, Robin; Boggs, Daniel; Yeh, Rosa
PATENT ASSIGNEE(S): Baxter International Inc., USA; Baxter Healthcare S.A.
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003106671	A1	20031224	WO 2003-US17530		20030603
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
US 2003235574	A1	20031225	US 2002-172657		20020614 <--
AU 2003237362	A1	20031231	AU 2003-237362		20030603
PRIORITY APPLN. INFO.:			US 2002-172657	A	20020614
			WO 2003-US17530	W	20030603

AB The present invention provides membranes impregnated with crosslinked enzyme crystals, devices, systems and **methods** of producing and using same for a variety of suitable applications including, for example, the removal of uremic toxins from dialyzate during dialysis therapy. In this regard, the enzyme impregnated membranes of the present invention can enzymically convert the uremic toxins into byproducts, thus allowing the dialyzate to be reused during therapy. This can effectively minimize the amount of dialyzate necessary for therapy, thus enhancing therapy and minimizing costs. Applicants have found that by using membranes impregnated with an amount of crosslinked enzyme crystal, such as urease CLEC, less urease can be used than that typically used in sorbent cartridges to remove urea from dialyzate. In addition to high enzymic-activity (about 750 units/mg), it is believed that this can be attributed to the fact that urease CLEC is effectively insol. in water as compared to the high water solubility of typically used urease materials. In this regard, it is believed that the urease CLEC impregnated within a polymer matrix of the membrane can be better contained in the sorbent cartridge such that excessive amts. thereof are not required to compensate for any potential loss of same during use. Further, the urease CLEC impregnated membranes of the present invention can be used without **alumina** or the like typically used to minimize leaching of urease and **alumina** from sorbent cartridges during therapy as previously discussed. Applicants have also found that the enzyme activity of the enzyme impregnated membranes of the present invention remains stable after exposure to gamma-radiation. Applicants have found that drying the membrane precipitate in a glycerol solution prior to use can effectively preserve

enzyme activity.
IT **872-50-4**, 1-Methyl-2-pyrrolidinone, uses
RL: NUU (Other use, unclassified); USES (Uses)
(preparing a casting solution composed of a polymeric base material in; membranes impregnated with cross-linked enzyme crystals and use for removal of uremic toxins from dialyzate)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:719445 HCAPLUS
DOCUMENT NUMBER: 139:230613
TITLE: **Method** for the simultaneous production of tetrahydrofurans and pyrrolidones
INVENTOR(S): Fischer, Rolf-Hartmuth; Roesch, Markus; Bottke, Nils; Weck, Alexander; Windecker, Gunther; Hesse, Michael; Borchert, Holger; Schlitter, Stephan
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: **Patent**
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003074482	A1	20030912	WO 2003-EP2048	20030228
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10209633	A1	20030911	DE 2002-10209633	20020302
AU 2003227027	A1	20030916	AU 2003-227027	20030228
EP 1483238	A1	20041208	EP 2003-743348	20030228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005119494	A1	20050602	US 2003-505706	20030228 <--
CN 1639118	A	20050713	CN 2003-805107	20030228
JP 2005530700	T2	20051013	JP 2003-572952	20030228
PRIORITY APPLN. INFO.:			DE 2002-10209633 A	20020302
			WO 2003-EP2048 W	20030228

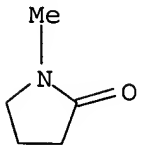
OTHER SOURCE(S): CASREACT 139:230613

AB A **method** for the simultaneous production of optionally alkyl-substituted tetrahydrofurans and pyrrolidones comprises the gas-phase catalytic hydrogenation of C4 dicarboxylic acids and/or derivs. thereof in the presence of copper-containing catalysts and the reaction of γ-butyrolactone (I) with ammonia or primary amines to give pyrrolidones, whereby the C4 dicarboxylic acid derivs. are hydrogenated in the gas phase at 200 to 300 °C, 0.1 to 100 bar. Catalytic loadings are 0.01 to 1 kg starting material/L catalyst.hour and starting material/hydrogen mol. ratios of 20 to 800 in the presence of catalysts comprising copper, aluminum and/or zinc to give mixts. of THF and I, the product from hydrogenation is separated by distillation into a THF/water mixture as top product and a bottom product comprising I, the THF/water mixture from the second step is separated in a distillation arrangement comprising three columns. Water is drawn off from the bottom of the first column, THF containing water is recycled from the second column to the first column, a side stream from the first column is fed to the second column, the bottom product from the third column is recycled to the first column. A distillate is taken from the head of the first column, a side discharge from the second column is fed to the third column and the pure THF is obtained as the top product from the third column, I is obtained from the I-containing bottom product from the second step by distillation and the I thus obtained is reacted with ammonia or amines to give pyrrolidones.

IT **872-50-4P**, N-Methylpyrrolidone, preparation
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(**method** for the simultaneous production of tetrahydrofurans and pyrrolidones)

RN 872-50-4 HCAPLUS

CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:609488 HCAPLUS

DOCUMENT NUMBER: 139:137938

TITLE: **Method** of treating fats and oils

INVENTOR(S): Nakajoh, Katsuhiko; Muramatsu, Takehiko; Maezawa, Yukishige; Kon, Masao; Todoroki, Tomohiro; Nishizawa, Katsushi; Ohara, Atsushi

PATENT ASSIGNEE(S): Kabushiki Kaisha Toshiba, Japan

SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW

DOCUMENT TYPE: **Patent**

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

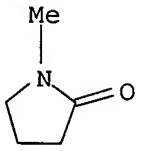
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1332774	A2	20030806	EP 2003-250743	20030205
EP 1332774	A3	20031217		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2003225507	A2	20030812	JP 2002-28370	20020205
JP 2003225504	A2	20030812	JP 2002-28371	20020205
CA 2418443	AA	20030805	CA 2003-2418443	20030204
AU 2003200424	A1	20030821	AU 2003-200424	20030205
US 2003175401	A1	20030918	US 2003-358335	20030205 <--
US 6998050	B2	20060214		
PRIORITY APPLN. INFO.:			JP 2002-28370 A	20020205
			JP 2002-28371 A	20020205

AB The present invention provides a **method** of treating fats and oils containing low concentration aromatic halogen compds. which could remove the aromatic halogen compound contaminant efficiently from the oil and fats. The fats and oils are treated with an adsorbing agent comprising a porous body and a non-protonic polar solvent held in the interiors of fine pores in the porous body, with contaminated fats and oils containing organic pollutants, and adsorbing the pollutants in the non-protonic polar solvent in the porous body. The other **method** of treating fats and oils is comprising an adsorbing step of contacting fats and oils containing aromatic halogenated compds. with an adsorbing agent comprising a solid acid to adsorb the aromatic halogenated compds. onto the adsorbing agent, and a step of contacting the adsorbing agent with an organic solvent to extract the aromatic halogenated compds. adsorbed on the adsorbing agent into the organic solvent.

IT **872-50-4**, N-Methyl-2-pyrrolidone, uses
RL: NUU (Other use, unclassified); USES (Uses)
(as non-protonic polar solvent held in porous body; **methods** for removing persistent organic pollutants efficiently from oils and fats)

RN 872-50-4 HCAPLUS

CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L12 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:335450 HCAPLUS

DOCUMENT NUMBER: 138:330011

TITLE: Polishing compound, **method** for production thereof, and polishing **method**

INVENTOR(S): Takemiya, Satoshi; Nakazawa, Norihito; Kon, Yoshinori

PATENT ASSIGNEE(S): Asahi Glass Company, Limited, Japan; Seimi Chemical Co., Ltd.

SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2

DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

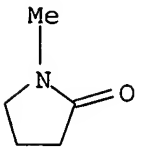
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003036705	A1	20030501	WO 2002-JP10996	20021023
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1445796	A1	20040811	EP 2002-770253	20021023
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2004194392	A1	20041007	US 2004-831618	20040426 <--
PRIORITY APPLN. INFO.:			JP 2001-329148 A	20011026
			JP 2001-353207 A	20011119
			WO 2002-JP10996 W	20021023

AB A **method** for producing a polishing compound is described, which comprises dissolving a heterocyclic benzene compound such as benzotriazole in ≥1 organic solvents selected from the group consisting of a primary alc. having 1-4 C atoms, a glycol having 2-4 C atoms, an ether represented by CH3CH(OH)CH2OCmH2m+1, where m is an integer of 1-4, N-methyl-2-pyrrolidone, DMF, DMSO, γ-butyrolactone and propylene carbonate, and then mixing the resulting solution with an aqueous dispersion of fine oxide particles as abrasive grains. A polishing compound produced by the **method** is also described. The use of the polishing compound for polishing a substrate having an insulating film and, formed thereon, a wiring metal film and a barrier film gives an embedded wiring being reduced in dishing, in erosion, and in scratch, with high polishing speed.

IT **872-50-4**, N-Methyl-2-pyrrolidone, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polishing compound, **method** for production thereof, and polishing **method** in wiring formation)

RN 872-50-4 HCAPLUS

CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:58638 HCAPLUS
DOCUMENT NUMBER: 138:116379
TITLE: Jetting behavior in the laser forward transfer of rheological systems
INVENTOR(S): Young, Henry Daniel; Auyeung, Raymond C. Y.; Ringeisen, Bradley R.; Chrisey, Douglas B.; Dlott, Dana D.
PATENT ASSIGNEE(S): The United States of America as represented by the

	Secretary of the Navy, USA
SOURCE:	U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S. Pat. Appl. 2002 197,401.
	CODEN: USXXCO
DOCUMENT TYPE:	**Patent**
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	6
PATENT INFORMATION:	

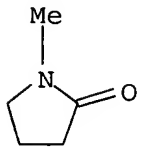
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003017277	A1	20030123	US 2002-237072	20020909 <--
US 6815015	B2	20041109		
US 6177151	B1	20010123	US 1999-318134	19990525 <--
US 6766764	B1	20040727	US 2000-671166	20000928 <--
US 2002122898	A1	20020905	US 2002-68315	20020208 <--
US 6905738	B2	20050614		
US 2002197401	A1	20021226	US 2002-141820	20020510 <--
US 6805918	B2	20041019		

PRIORITY APPLN. INFO.:	US 1999-117468P	P	19990127
	US 1999-318134	A3	19990525
	US 2000-671166	A2	20000928
	US 2001-327733P	P	20011004
	US 2002-68315	A2	20020208
	US 2002-141820	A2	20020510
	US 2001-269384P	P	20010220
	US 2001-290400P	P	20010511

AB The invention relates generally to a laser transfer **method** for the deposition of a jet of a rheol. fluid or system onto a substrate. A **method** is presented for laser transfer and deposition of a rheol. fluid in which laser energy strikes a target substrate comprising a rheol. fluid, causing a portion of the rheol. fluid to evaporate and propel a jet of non-evaporated rheol. fluid onto a receiving substrate. It is an object of the invention to provide **methods** for depositing a rheol. fluid on a receiving substrate using a laser forward transfer apparatus that can produce a pattern with a resolution on the order of a few microns. It is a further object of the invention that the **method** use laser fluences lower than that required by other laser transfer **methods**. It is a further object of the invention that the **method** allow for higher d. and linewidth definition in the transferred material. It is a further object of the invention to provide a **method** that produces jetting behavior in the transferring rheol. fluid. It is a further object of the invention to use jetting to produce an area of deposit much smaller than the area of the incident laser energy. These and other objects of the invention are accomplished by a **method** for laser deposition comprising the steps of: providing a receiving substrate; providing a target substrate; in which the target substrate comprises a laser-transparent support coated with a coating on a surface facing the receiving substrate; and exposing the coating to laser energy through the laser-transparent support at a defined target location comprising a rheol. fluid to evaporate a portion of the rheol. fluid adjacent to the laser-transparent support at the defined target location; in which the laser energy has a laser fluence that is chosen to cause jetting behavior in the non-evaporated rheol. fluid; in which the non-evaporated rheol. fluid at the defined target location is propelled by the evaporated rheol. fluid away from the laser-transparent support and toward the receiving substrate; and in which the non-evaporated rheol. fluid is deposited at a defined receiving location on the receiving substrate to form a deposit.

IT **872-50-4**, 1-Methyl-2-pyrrolidinone, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(coating material; jetting behavior in laser forward transfer of rheol. systems)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:978354 HCAPLUS
DOCUMENT NUMBER: 138:64738
TITLE: Laser forward transfer of rheological systems
INVENTOR(S): Auyeung, Raymond C. Y.; Pique, Alberto; Young, Henry Daniel; Modi, Rohit; Wu, Huey-daw; Chrisey, Douglas B.; Fitz-Gerald, James M.; Ringeisen, Bradley R.
PATENT ASSIGNEE(S): The United States of America as represented by the Secretary of the Navy, USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S. Ser. No. 68,315.
CODEN: USXXCO
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

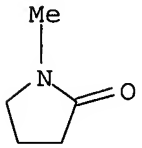
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 2002197401	A1	20021226	US 2002-141820	20020510	<--
US 6805918	B2	20041019			
US 6177151	B1	20010123	US 1999-318134	19990525	<--
US 6766764	B1	20040727	US 2000-671166	20000928	<--
US 2002122898	A1	20020905	US 2002-68315	20020208	<--
US 6905738	B2	20050614			
US 2003017277	A1	20030123	US 2002-237072	20020909	<--
US 6815015	B2	20041109			

PRIORITY APPLN. INFO.:

US 1999-318134	A3	19990525
US 2000-671166	A2	20000928
US 2001-290400P	P	20010511
US 2002-68315	A2	20020208
US 1999-117468P	P	19990127
US 2001-269384P	P	20010220
US 2001-327733P	P	20011004
US 2002-141820	A2	20020510

AB This invention describes a **method** for laser transfer and deposition of a rheol. fluid wherein laser energy strikes a target substrate comprising a rheol. fluid, causing a portion of the rheol. fluid to evaporate and propel nonevapd. rheol. fluid onto a receiving substrate.
IT **872-50-4**, 1-Methyl-2-pyrrolidinone, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(coating; deposition of rheol. systems on substrate using laser induced

forward transfer **method**)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:978171 HCAPLUS
DOCUMENT NUMBER: 138:42062
TITLE: **Method** for producing composite material comprising quinoxaline based polymer for battery electrodes
INVENTOR(S): Takeuchi, Masataka; Yasuda, Hiroshi; Mizuguchi, Junko
PATENT ASSIGNEE(S): Showa Denko K.K., Japan
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002103825	A1	20021227	WO 2002-JP5784	20020611
WO 2002103825	C1	20031211		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2003068307	A2	20030307	JP 2002-126434	20020426
TW 548867	B	20030821	TW 2002-91111891	20020603
US 2004185342	A1	20040923	US 2003-479486	20031203 <--

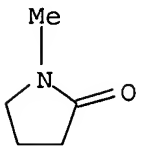
PRIORITY APPLN. INFO.:		
JP 2001-180067	A	20010614
JP 2001-180068	A	20010614
JP 2001-180069	A	20010614
US 2001-298880P	P	20010619
US 2001-298881P	P	20010619
US 2001-298894P	P	20010619
JP 2002-126434	A	20020426
WO 2002-JP5784	W	20020611

AB The present invention relates to a **method** for producing a polymer/conductive carbon composite electrode comprising dehydration condensation polymerization of a tetramine derivative and a tetracarbonyl compound in

the presence of an elec. conductive carbon material. The synthesized polymer comprises quinoxaline structural units such as polyphenyl quinoxaline and serves as an active material having proton conductivity The composite material for electrode obtained by the **method** has a large capacity of inserting/releasing a proton and excellent in durability. An electrode comprising the composite material and a secondary battery comprising the electrode is excellent in safety and reliability high-speed current characteristics, has a longer life and a larger gravimetric energy d.

IT **872-50-4**, n-Methylpyrrolidone, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**method** for producing composite material comprising quinoxaline based polymer for battery electrodes)

RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

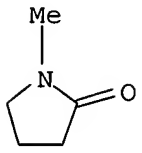
L12 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:866668 HCAPLUS
DOCUMENT NUMBER: 137:360350
TITLE: Liquid composition for forming a colored portion for ink jet recording **method** and ink jet recording apparatus
INVENTOR(S): Tomioka, Hiroshi; Kurabayashi, Yutaka; Kato, Masao; Endo, Makiko
PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan
SOURCE: Eur. Pat. Appl., 55 pp.
CODEN: EPXXDW
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1256459	A2	20021113	EP 2002-10445	20020508
EP 1256459	A3	20030514		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003070581	A1	20030417	US 2002-136353	20020502 <--
US 6821328	B2	20041123		
CA 2384632	AA	20021110	CA 2002-2384632	20020503
CN 1385478	A	20021218	CN 2002-119252	20020510
JP 2003048367	A2	20030218	JP 2002-134853	20020510
PRIORITY APPLN. INFO.:			JP 2001-140441 A	20010510

AB The present invention relates to a liquid composition for use in forming a colored portion by imparting it together with an ink containing a colorant to a recording medium. The liquid composition includes at least a solvent and fine

particles reactive with the colorant and, in which the fine particles in the liquid composition have an average particle diameter in a range of 30-200 nm, and a 10% cumulative value of scatting intensity of ≥ 10 nm and 90% cumulative value of scattering intensity of ≤ 300 nm, when measured by a dynamic light scattering **method.**

IT **872-50-4**, N-Methylpyrrolidone, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(liquid composition for ink jet recording **method** and apparatus containing)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



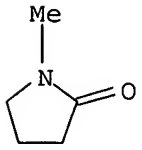
L12 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:172363 HCAPLUS
DOCUMENT NUMBER: 136:225722
TITLE: Low dielectric composite with nano magnetic particles and its manufacturing **method** for semiconductor device or optical device
INVENTOR(S): Park, Chan Eon; Kang, Jin-ho
PATENT ASSIGNEE(S): Pohang University of Science and Technology Foundation, S. Korea
SOURCE: U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002027262	A1	20020307	US 2001-839594	20010423 <--
US 6849926	B2	20050201		
KR 2001097506	A	20011108	KR 2000-21639	20000424

PRIORITY APPLN. INFO.: KR 2000-21639 A 20000424

AB A composite containing magnetic nanoparticles is provided which has a low dielec. constant, excellent thermal and mech. properties and low tendency to absorb moisture. The composite includes nano magnetic particles in a dielec. matrix. The matrix is made of an inorg. material such as SiO2, **alumina** or hydrogen silsesquioxane, or an organic material such as polyimide, polymethyl methacrylate (PMMA) or Me silsesquioxane. The nano magnetic particles consist of (γ-Fe2O3), Cr oxide (CrO2), Eu oxide (EuO), NiZn-ferrite, MnZn-ferrite, Yttrium-Fe garnet or In.

IT **872-50-4**, N-Methylpyrrolidone, uses
RL: NUU (Other use, unclassified); USES (Uses)
(in preparation of magnetic nanoparticles)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

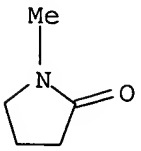


REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:107934 HCAPLUS
DOCUMENT NUMBER: 136:151002
TITLE: Palladium catalyzed cross coupling of aryl chlorides with aryl boronic acids to give biaryl compounds
INVENTOR(S): Sun, Yongkui; Leblond, Carl; Sowa, John R.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002016512	A1	20020207	US 2001-906244		20010716 <--
PRIORITY APPLN. INFO.:			US 2000-218990P	P	20000717

OTHER SOURCE(S): CASREACT 136:151002
AB A **method** of Pd catalyzed cross coupling of aryl and heteroaryl chlorides with boronic acids to give biaryls is described. Thus, 4-chloroanisole underwent cross-coupling with phenylboronic acid in the presence of 5 weight % Pd on carbon to give 33% 4-phenylanisole.
IT **872-50-4**, uses
RL: NUU (Other use, unclassified); USES (Uses)
(palladium catalyzed cross coupling of aryl chlorides with aryl boronic acids to give biaryl compds.)
RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L12 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:257474 HCAPLUS
DOCUMENT NUMBER: 116:257474
TITLE: **Methods** and compositions for corrosion protection of metals by means of waterborne polymeric films
INVENTOR(S): Muller, Frank A.; Zaelke, Arnold E.
PATENT ASSIGNEE(S): Atochem North America, Inc., USA
SOURCE: U.S., 4 pp. Cont.-in-part of U.S. Ser. No. 679,879,

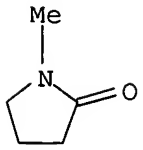
abandoned.
CODEN: USXXAM
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5085696	A	19920204	US 1991-735481	19910725 <--
AU 9182702	A1	19920305	AU 1991-82702	19910826
JP 04234463	A2	19920824	JP 1991-238886	19910827
DE 4128572	A1	19920305	DE 1991-4128572	19910828
FR 2666341	A1	19920306	FR 1991-10688	19910828
NL 9101457	A	19920316	NL 1991-1457	19910828
BR 9103698	A	19920519	BR 1991-3698	19910828
PRIORITY APPLN. INFO.:			US 1990-575042 B2	19900819
			US 1991-679879 B2	19910403
			US 1991-735481 A	19910725

AB Anticorrosion emulsion compns. comprise acrylic resin 30-90, water-soluble blocked Zr catalyst 1-5%, n-PrOH- or iso-PrOH- or glycol ether- or N-methylpyrrolidone(I)-H2O mixture in 3-20:8-55, and corrosion additive 0.3-3%. Thus, a formulation of Rhoplex AC 1803 (acrylic resin) 60, H2O 28.89, Bacote 20 (ammonium zirconium carbonate solution) 2.5, Na 2-mercaptobenzothiazole 1.1, triethanolamine phosphate 0.03, I 5.0, iso-PrOH 2.4, Me Parasept 0.01, 2,2'-methylenebis(4-methyl-6-tert-butylphenol) 0.05, and Pluronic L61 0.02% gave Al panels with protective films which passed the 168 h salt spray test (ASTM-B-117-73).

IT **872-50-4**, uses
RL: USES (Uses)
(mixture with water, to thicken acrylic anticorrosive coatings for aluminum)

RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L12 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1988:97713 HCAPLUS
DOCUMENT NUMBER: 108:97713
TITLE: A **method** of removing impurities from N-methylpyrrolidone used for solvent extraction of lube oil fractions using activated **alumina**
INVENTOR(S): Krupay, Bordan Walter; Reid, Lloyd E.
PATENT ASSIGNEE(S): Exxon Research and Engineering Co., USA
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: **Patent**
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 251517	A2	19880107	EP 1987-305022	19870605
EP 251517	A3	19890208		
EP 251517	B1	19920115		
R: DE, FR, GB, IT				
US 4837338	A	19890606	US 1986-874474	19860616 <--
CA 1300163	A1	19920505	CA 1987-538469	19870601
JP 63002974	A2	19880107	JP 1987-148153	19870616
JP 07098799	B4	19951025		

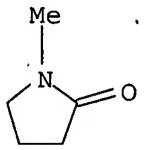
PRIORITY APPLN. INFO.: US 1986-874474 A 19860616

AB N-Methylpyrrolidone solvent used to extract aromatic components from lubricating oil distillates is purified by contacting the solvent with activated Al2O3 which has been water-washed to remove any Na oxide present. The activated Al2O3 is washed until the elec. conductivity of the wash water is reduced to .apprx.100 μmho/cm. Contact between the solvent and water-washed activated Al2O3 occurs at 10-200° and 0.2-20 h-1 liquid space velocity.

IT **872-50-4P**, N-Methylpyrrolidone, uses and miscellaneous
RL: PREP (Preparation); USES (Uses)
(extraction solvent, spent, for lubricating oils, purification of, by activated **alumina**)

RN 872-50-4 HCAPLUS

CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L12 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1977:452920 HCAPLUS

DOCUMENT NUMBER: 87:52920

TITLE: Adsorbent treating **method**

INVENTOR(S): Ward, Dennis J.; Winter, George R., III

PATENT ASSIGNEE(S): UOP Inc., USA

SOURCE: U.S., 6 pp.
CODEN: USXXAM

DOCUMENT TYPE: **Patent**

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4008289	A	19770215	US 1975-594142	19750707 <--
GB 1591891	A	19810701	GB 1977-1876	19770118
SU 1153813	A3	19850430	SU 1977-2446253	19770131

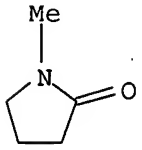
PRIORITY APPLN. INFO.: US 1975-594142 A 19750707

AB A **method** is described for removing adsorbed material from solid adsorbents, e.g., Al2O3 and silica gel, used to treat liquid hydrocarbons, which comprises the steps of (1) withdrawing liquid hydrocarbon stream from fractionating column, (2) vaporizing this stream, (3) superheating the

vapor stream, (4) contacting the solid adsorbent with the vapor stream to remove the adsorbed material, and (5) returning the vapor stream to the fractionating column as a stripping vapor. Regeneration of Al2O3, in the manufacture of PhEt by alkylation of C6H6 with ethylene in the presence of BF3, is outlined; a flow diagram of the apparatus is given.

IT **872-50-4**, uses and miscellaneous
RL: REM (Removal or disposal); PROC (Process)
(removal of, from benzene, regeneration of silica gel adsorbent in)

RN 872-50-4 HCAPLUS
CN 2-Pyrrolidinone, 1-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

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           656 METHYLS
        961896 METHYL
                  (METHYL OR METHYLS)
        907078 ME
         10305 MES
        913444 ME
                  (ME OR MES)
       1547974 METHYL
                  (METHYL OR ME)
       8697223 2
         21297 PYRROLIDONE
           721 PYRROLIDONES
         21527 PYRROLIDONE
                  (PYRROLIDONE OR PYRROLIDONES)
L13       6896 N-METHYL-2-PYRROLIDONE
                  (N(W)METHYL(W)2(W)PYRROLIDONE)

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       3063104 METHOD
       1257261 METHODS
       3966482 METHOD
                  (METHOD OR METHODS)
L14        939 L13 AND METHOD

=> S L14 AND ALUMINA
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          2515 ALUMINAS
        279493 ALUMINA
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         19230 ISOBUTYLENE
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L16 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:985345 HCAPLUS
DOCUMENT NUMBER: 143:288367
TITLE: **Method** for purifying **N-methyl-2-pyrrolidone** by treatment with an **alumina** adsorbent
INVENTOR(S): Kahn, Andrew P.; Weir, Thomas W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 5 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005197502	A1	20050908	US 2004-791982	20040303
WO 2005092851	A1	20051006	WO 2005-US3202	20050203

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-791982 A 20040303

AB A **method** for purifying **N-methyl-2-pyrrolidone** (I) comprises treating the I with an **alumina** that desorbs <100 μmol/g of **isobutylene** between 225-400° in a standard tert-Bu alc. dehydration test. The **method** enables the removal of at least about 80% of amine impurities or ≥60% of the APHA color from the I at 4 bed vols. treated.

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L15 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:985345 HCAPLUS
DOCUMENT NUMBER: 143:288367
TITLE: **Method** for purifying **N-methyl-2-pyrrolidone** by treatment with an **alumina** adsorbent
INVENTOR(S): Kahn, Andrew P.; Weir, Thomas W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 5 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005197502	A1	20050908	US 2004-791982	20040303
WO 2005092851	A1	20051006	WO 2005-US3202	20050203

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-791982 A 20040303

AB A **method** for purifying **N-methyl-2-pyrrolidone** (I) comprises treating the I with an **alumina** that desorbs <100 μmol/g of isobutylene between 225-400° in a standard tert-Bu alc. dehydration test. The **method** enables the removal of at least about 80% of amine impurities or ≥60% of the APHA color from the I at 4 bed vols. treated.

L15 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:5419 HCAPLUS
DOCUMENT NUMBER: 142:356223
TITLE: **Method** for preparing nano Al2O3 SiO2-polysulfone composite film with mesophase structure
INVENTOR(S): Zhang, Yuqing; Chen, Chao; Zhu, Yongjun; Qin, Shulan; Xu, Qiang; Hu, Chunping
PATENT ASSIGNEE(S): Tianjin University, Peop. Rep. China; Guozhong Aihua Tianjin Civil Environmental Engineering Co., Ltd.
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1478590	A	20040303	CN 2003-130377	20030709

PRIORITY APPLN. INFO.: CN 2003-130377 20030709

AB The **method** comprises mixing polysulfone with a hole-forming agent (at a ratio of 0.2-0.5) at 20-65° in organic solvent for 4-15 h to obtain solution I; treating 1-200 nm Al2O3 SiO2 powder with a surface activating agent (at a ratio of 0.2-0.8) at 18-30° for 8-48 h, dispersing in organic solvent under ultrasonic vibration for 10-30 min, mixing with solution I at a ratio of Al2O3 SiO2 to polysulfone of 0.1-0.5, defoaming for 20-30 h, and film forming. The organic solvent is DMF, DMA, or **N-methyl-2-pyrrolidone.** The hole-forming agent is polyvinylpyrrolidone, polyethylene glycol, acetone, or chloroform. The surface activating agent is polydiethylsilane, polydimethylsilane, titanate ester, stearic acid, Na stearate, etc.

L15 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:517665 HCAPLUS
DOCUMENT NUMBER: 141:211183
TITLE: Towards single step production of multi-layer inorganic hollow fibers
AUTHOR(S): De Jong, J.; Benes, N. E.; Koops, G. H.; Wessling, M.
CORPORATE SOURCE: Membrane Technology Group, Faculty of Science and Technology, University of Twente, Enschede, NL-7500 AE, Neth.
SOURCE: Journal of Membrane Science (2004), 239(2), 265-269
CODEN: JMESDO; ISSN: 0376-7388
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In this work we propose a generic synthesis route for the single step production of multi-layer inorg. hollow fibers, based on polymer wet spinning combined with a heat treatment. With this new **method**, membranes with a high surface area per unit volume ratio can be produced, while production time and costs are dramatically reduced. The proof-of-principle of the concept will be demonstrated with the production of double layer α-**alumina** hollow fibers. Although various problems were anticipated at the interface of the layers, the adhesion between the two layers is surprisingly good, both in the precursor and the sintered fiber. Produced fibers show an asym. structure with a porosity 37-45%. The macrostructure of the sintered fiber is largely determined by the macrostructure of the precursor fiber, while differences in microstructure disappear during the heat treatment step. The proposed **method** is not limited to α- **alumina** membranes; in principle many ceramic or metallic powders may be used. This means that this **method** can open up the way for a new generation of membranes.

L15 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:760006 HCAPLUS
DOCUMENT NUMBER: 140:410762
TITLE: Preparation of porous aluminium oxide (Al2O3) hollow fibre membranes by a combined phase-inversion and sintering **method**
AUTHOR(S): Liu, Shaomin; Li, K.; Hughes, R.
CORPORATE SOURCE: Institute of Environmental Science and Engineering, Singapore, 637723, Singapore
SOURCE: Ceramics International (2003), 29(8), 875-881
CODEN: CINNDH; ISSN: 0272-8842
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Al2O3 hollow fiber membranes were prepared by a combined phase-inversion and sintering **method.** An organic binder solution (dope) containing suspended aluminum oxide (Al2O3) powders, either in mono size or a distributed size, is spun to a hollow fiber precursor, which is then sintered at elevated temps. In spinning the hollow fiber precursor, polyethersulfone (PESf), **N-methyl-2-pyrrolidone** (NMP) and polyvinyl pyrrolidone (PVP) were used as a polymer binder, a solvent and an additive, resp. The Al2O3 hollow fiber membranes prepared were characterized by SEM and gas permeation techniques. Effects of Al2O3 particle size and size distribution, the sintering temperature and Al2O3/PESf ratio on the structure and performance of the resulting membranes were studied extensively. The prepared Al2O3 hollow fiber membranes retains its asym. structure (mainly resulted from the phase inversion technique) even

after the sintering process. Preparation of the Al2O3 hollow fiber membrane with a high mech. strength and moderate permeation characteristics is feasible if the Al2O3 powders with a distributed particle size in the spinning (dope) solution is employed.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:609488 HCAPLUS
DOCUMENT NUMBER: 139:137938
TITLE: **Method** of treating fats and oils
INVENTOR(S): Nakajoh, Katsuhiko; Muramatsu, Takehiko; Maezawa, Yukishige; Kon, Masao; Todoroki, Tomohiro; Nishizawa, Katsushi; Ohara, Atsushi
PATENT ASSIGNEE(S): Kabushiki Kaisha Toshiba, Japan
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1332774	A2	20030806	EP 2003-250743	20030205
EP 1332774	A3	20031217		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2003225507	A2	20030812	JP 2002-28370	20020205
JP 2003225504	A2	20030812	JP 2002-28371	20020205
CA 2418443	AA	20030805	CA 2003-2418443	20030204
AU 2003200424	A1	20030821	AU 2003-200424	20030205
US 2003175401	A1	20030918	US 2003-358335	20030205
US 6998050	B2	20060214		

PRIORITY APPLN. INFO.: JP 2002-28370 A 20020205
JP 2002-28371 A 20020205

AB The present invention provides a **method** of treating fats and oils containing low concentration aromatic halogen compds. which could remove the aromatic halogen compound contaminant efficiently from the oil and fats. The fats and oils are treated with an adsorbing agent comprising a porous body and a non-protonic polar solvent held in the interiors of fine pores in the porous body, with contaminated fats and oils containing organic pollutants, and adsorbing the pollutants in the non-protonic polar solvent in the porous body. The other **method** of treating fats and oils is comprising an adsorbing step of contacting fats and oils containing aromatic halogenated compds. with an adsorbing agent comprising a solid acid to adsorb the aromatic halogenated compds. onto the adsorbing agent, and a step of contacting the adsorbing agent with an organic solvent to extract the aromatic halogenated compds. adsorbed on the adsorbing agent into the organic solvent.

L15 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:495919 HCAPLUS
DOCUMENT NUMBER: 139:248942
TITLE: Preparation TiO2/Al2O3 composite hollow fibre membranes
AUTHOR(S): Liu, Shaomin; Li, K.
CORPORATE SOURCE: Institute of Environmental Science and Engineering, Singapore, 637723, Singapore

SOURCE: Journal of Membrane Science (2003), 218(1-2), 269-277
CODEN: JMESDO; ISSN: 0376-7388
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Aluminum oxide (Al2O3) hollow fibers were prepared by a combined phase inversion/sintering **method.** An organic binder solution (dope) containing suspended Al2O3 powders is spun into a hollow fiber precursor, which is then sintered at elevated temps. In spinning the hollow fiber precursor, polyethersulfone (PESf), **N-methyl-2-pyrrolidone** (NMP) and polyvinylpyrrolidone (PVP) were used as a polymer binder, a solvent and an additive, resp. The prepared Al2O3 hollow fiber membranes with suitable surface roughness were then used as substrates for the fabrication of porous or dense TiO2/Al2O3 composite membranes via direct deposition using an aqueous solution containing titanium tetrafluoride. The prepared Al2O3 substrates and the TiO2/Al2O3 composite hollow fiber membranes were characterized by SEM, X-ray diffraction (XRD) and gas permeation techniques. The results indicate that TiO2-based hollow fiber membranes, consisting of small anatase nano-particles, exhibit excellent adhesion to the outside surface of the tailor-made Al2O3 hollow fiber substrates.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:335450 HCAPLUS
DOCUMENT NUMBER: 138:330011
TITLE: Polishing compound, **method** for production thereof, and polishing **method**
INVENTOR(S): Takemiya, Satoshi; Nakazawa, Norihito; Kon, Yoshinori
PATENT ASSIGNEE(S): Asahi Glass Company, Limited, Japan; Seimi Chemical Co., Ltd.
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003036705	A1	20030501	WO 2002-JP10996	20021023
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1445796	A1	20040811	EP 2002-770253	20021023
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2004194392	A1	20041007	US 2004-831618	20040426
PRIORITY APPLN. INFO.:			JP 2001-329148 A	20011026
			JP 2001-353207 A	20011119
			WO 2002-JP10996 W	20021023

AB A **method** for producing a polishing compound is described, which comprises dissolving a heterocyclic benzene compound such as benzotriazole in ≥1 organic solvents selected from the group consisting of a primary alc. having 1-4 C atoms, a glycol having 2-4 C atoms, an ether represented by CH3CH(OH)CH2OCmH2m+1, where m is an integer of 1-4, **N-methyl-2-pyrrolidone**, DMF, DMSO, γ-butyrolactone and propylene carbonate, and then mixing the resulting solution with an aqueous dispersion of fine oxide particles as abrasive grains. A polishing compound produced by the **method** is also described. The use of the polishing compound for polishing a substrate having an insulating film and, formed thereon, a wiring metal film and a barrier film gives an embedded wiring being reduced in dishing, in erosion, and in scratch, with high polishing speed.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:747917 HCAPLUS
DOCUMENT NUMBER: 137:279963
TITLE: Oxide filler-containing slurry composition
INVENTOR(S): Sakai, Takenobu; Abe, Akira; Yang, Wu
PATENT ASSIGNEE(S): Toyota Motor Corp., Japan; Admatechs Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002285003	A2	20021003	JP 2001-85650	20010323

PRIORITY APPLN. INFO.: JP 2001-85650 20010323

AB Title slurry composition is obtained by dispersing a filler (silica) in an organic solvent and is useful in preparing a filler-containing resin composition by dispersing the slurry in a resin matrix, where the filler is characterized by being oxide particles having a shape approx. to spherical and is produced by VMC (vaporized metal combustion) **method.** The filler may also be surface-treated and may contain a precipitation-preventing agent.

L15 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:868873 HCAPLUS
DOCUMENT NUMBER: 136:9101
TITLE: Fabrication **method** for lithium secondary battery with polymer electrolyte prepared by spray **method**
INVENTOR(S): Yun, Kyung Suk; Cho, Byung Won; Cho, Won Il; Kim, Hyung Sun; Kim, Un Seok
PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091222	A1	20011129	WO 2000-KR515	20000522
W: JP, KR, US				
PRIORITY APPLN. INFO.:			WO 2000-KR515	20000522

AB The present invention provides a lithium secondary battery and its fabrication **method.** More particularly, the present invention provides a lithium secondary battery comprising a porous polymer electrolyte and its fabrication **method**, wherein the polymer electrolyte is fabricated by the following process: (a) dissolving at least one polymer with plasticizers and organic electrolyte solvents to obtain at least one polymeric electrolyte solution; (b) adding the obtained polymeric electrolyte solution to a barrel of a spray machine, and (c) spraying the polymeric electrolyte solution onto a substrate using a nozzle to form a porous polymer electrolyte film. The lithium secondary battery of the present invention has advantages of better adhesion with electrodes, good mech. strength, better performance at low and high temps., and better compatibility with organic electrolytes of a lithium secondary battery.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:868872 HCAPLUS
DOCUMENT NUMBER: 136:9100
TITLE: A lithium secondary battery comprising composite polymer electrolyte fabricated by a spray **method**
INVENTOR(S): Yun, Kyung Suk; Cho, Byung Won; Cho, Won Il; Kim, Hyung Sun; Kim, Un Seok
PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091221	A1	20011129	WO 2000-KR514	20000522
W: JP, KR, US				
PRIORITY APPLN. INFO.:			WO 2000-KR514	20000522

AB The present invention provides a novel composite polymer electrolyte, lithium secondary battery comprising the composite polymer electrolyte and their fabrication **methods.** More particularly, the present invention provides the composite polymer electrolyte comprising a porous polymer electrolyte matrix with particles, fibers or mixture thereof having diams. of 1-3000 nm, polymers and lithium salt-dissolved organic electrolyte solns. incorporated into the porous polymer matrix. The composite polymer electrolyte of the present invention has advantages of better adhesion with electrodes, good mech. strength, better performance at low and high temps., better compatibility with organic electrolytes of lithium secondary battery and it can be applied to the manufacture of lithium secondary batteries.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:868871 HCAPLUS
DOCUMENT NUMBER: 136:9099
TITLE: Fabrication of a lithium secondary battery comprising a hybrid polymer electrolyte prepared by a spray **method**
INVENTOR(S): Yun, Kyung Suk; Cho, Byung Won; Cho, Won Il; Kim, Hyung Sun; Kim, Un Seok
PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091220	A1	20011129	WO 2000-KR513	20000522
W: JP, KR, US				
PRIORITY APPLN. INFO.:			WO 2000-KR513	20000522

AB The present invention provides a novel hybrid polymer electrolyte, a lithium secondary battery comprising the hybrid polymer electrolyte and their fabrication **methods.** More particularly, the present invention provides the hybrid polymer electrolyte comprising a porous polymer matrix with particles, fibers or mixture thereof having diams. of 1-3000 nm, polymers and lithium salt-dissolved organic electrolyte solns. incorporated into the porous polymer matrix. The hybrid polymer electrolyte has advantages of better adhesion with electrodes, good mech. strength, better performance at low- and high-temps., better compatibility with organic electrolytes of a lithium secondary battery and it can be applied to the manufacture of lithium secondary batteries.
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:868870 HCAPLUS
DOCUMENT NUMBER: 136:9098
TITLE: A lithium secondary battery comprising a porous polymer separator film fabricated by a spray **method**
INVENTOR(S): Yun, Kyung Suk; Cho, Byung Won; Cho, Won Il; Kim, Hyung Sun; Kim, Un Seok
PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091219	A1	20011129	WO 2000-KR512	20000522
W: JP, KR, US				
PRIORITY APPLN. INFO.:			WO 2000-KR512	20000522

AB The present invention provides a lithium secondary battery and its fabrication **method.** More particularly, the present invention provides a lithium secondary battery comprising a porous polymer separator film and its fabrication **method**, wherein the porous polymer

separator film is fabricated by the following process : (a) melting at least one polymer or dissolving at least one polymer with an organic solvent to obtain at least one polymeric melt or at least one polymeric solution; (b) adding the obtained polymeric melt or polymeric solution to barrels of a spray machine; and (c) spraying the polymeric melt or polymeric solution onto a substrate using a nozzle to form a porous separator film. The lithium secondary battery of the present invention has advantages of better adhesion with electrodes, good mech. strength, better performance at low and high temps., and better compatibility with an organic electrolyte solution of a lithium secondary battery.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:851557 HCAPLUS
DOCUMENT NUMBER: 135:374196
TITLE: Fabrication of a lithium secondary battery comprising a superfine fibrous polymer electrolyte
INVENTOR(S): Yun, Kyung Suk; Cho, Byung Won; Jo, Seong Mu; Lee, Wha Seop; Cho, Won Il; Park, Kun You; Kim, Hyung Sun; Kim, Un Seok; Ko, Seok Ku; Chun, Suk Won; Choi, Sung Won
PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001089023	A1	20011122	WO 2000-KR501	20000519
W: JP, KR, US				
PRIORITY APPLN. INFO.:			WO 2000-KR501	20000519

AB The present invention provides a lithium secondary battery and its fabrication **method.** More particularly, the present invention provides a lithium secondary battery comprising super fine fibrous porous polymer electrolyte and its preparation **method**, wherein the polymer electrolyte is fabricated by the following process: (a) dissolving at least one polymer with plasticizers and y organic electrolyte solvents to obtain at least one polymeric electrolyte solution; (b) adding the obtained polymeric electrolyte solution to a barrel of an electrospinning machine; and, (c) electropinning the polymeric electrolyte solution onto a substrate using a nozzle to form a polymer electrolyte film. The lithium secondary battery of the present invention has advantages of better adhesion with electrodes, good mech. strength, better performance at low and high temps., and better compatibility with organic electrolytes of a lithium secondary battery.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:851556 HCAPLUS
DOCUMENT NUMBER: 135:374195
TITLE: Fabrication of a lithium secondary battery comprising a superfine fibrous polymer separator film
INVENTOR(S): Yun, Kyung Suk; Cho, Byung Won; Jo, Seong Mu; Lee, Wha Seop; Cho, Won Il; Park, Kun You; Kim, Hyung Sun; Kim, Un Seok; Ko, Seok Ku; Chun, Suk Won; Choi, Sung Won

PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001089022	A1	20011122	WO 2000-KR500	20000519
W: JP, KR, US				
JP 2003533862	T2	20031111	JP 2001-585344	20000519

PRIORITY APPLN. INFO.: WO 2000-KR500 W 20000519

AB The present invention provides a lithium secondary battery and its fabrication **method.** More particularly, the present invention provides a lithium secondary battery comprising a super fine fibrous porous polymer separator film and its fabrication **method,** wherein the porous polymer separator film is fabricated by the following process: (a) melting at least one polymer or dissolving at least one polymer with organic solvents to obtain at least one polymeric melt or at least one polymeric solution; (b) adding the obtained polymeric melt or polymeric solution to barrels of an electrospinning machine; and (c) discharging the polymeric melt or polymeric solution onto a substrate using a nozzle to form a porous separator film. The lithium secondary battery of the present invention has the advantages of better adhesion with electrodes, good mech. strength, better performance at low and high temps., and better compatibility with organic electrolyte solution of a lithium secondary battery.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:851555 HCAPLUS
DOCUMENT NUMBER: 135:374194
TITLE: Fabrication of composite polymer electrolyte and a lithium secondary battery comprising the composite polymer electrolyte
INVENTOR(S): Yun, Kyung Suk; Cho, Byung Won; Jo, Seong Mu; Lee, Wha Seop; Cho, Won Il; Park, Kun You; Kim, Hyung Sun; Kim, Un Seok; Ko, Seok Ku; Choi, Sung Won
PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea; Chun, Suk Won
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001089021	A1	20011122	WO 2000-KR499	20000519
W: JP, KR, US				

PRIORITY APPLN. INFO.: WO 2000-KR499 20000519

AB The present invention provides a novel composite polymer electrolyte, lithium secondary battery comprising the composite polymer electrolyte and their fabrication **methods.** More particularly, the present invention provides the composite polymer electrolyte comprising super fine

fibrous porous polymer electrolyte matrix with particles having diameter of 1-3000 nm, polymers and lithium salt-dissolved organic electrolyte solns. incorporated into the porous polymer electrolyte matrix. The composite polymer electrolyte of the present invention has advantages of better adhesion with electrodes, good mech. strength, better performance at low and high temps., better compatibility with organic electrolytes of lithium secondary battery and it can be applied to the manufacture of lithium secondary batteries.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:851554 HCAPLUS
DOCUMENT NUMBER: 135:374193
TITLE: Fabrication **method** of lithium secondary battery with hybrid polymer electrolyte
INVENTOR(S): Yun, Kyung Suk; Cho, Byung Won; Jo, Seong Mu; Lee, Wha Seop; Cho, Won Il; Park, Kun You; Kim, Hyung Sun; Kim, Un Seok; Ko, Seok Ku; Chun, Suk Won; Choi, Sung Won
PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001089020	A1	20011122	WO 2000-KR498	20000519
W: JP, KR, US				
JP 2003533861	T2	20031111	JP 2001-585342	20000519

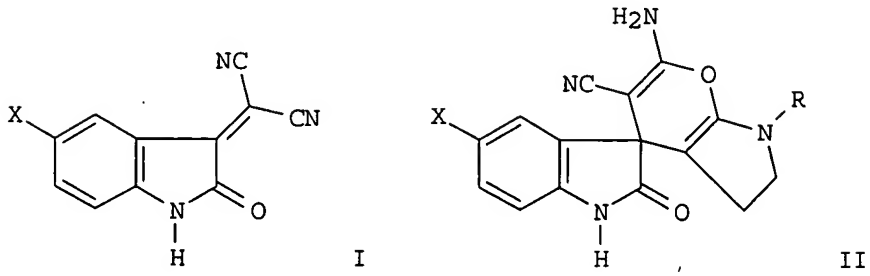
PRIORITY APPLN. INFO.: WO 2000-KR498 W 20000519

AB The present invention provides a novel hybrid polymer electrolyte, a lithium secondary battery comprising the hybrid polymer electrolyte polymer and their fabrication **methods.** More particularly, the present invention provides the hybrid polymer electrolyte comprising superfine fibrous porous polymer matrix with particles having diameter of 1-3000 nm, polymers and lithium salt-dissolved organic electrolyte solns. incorporated into the porous polymer matrix. The hybrid polymer electrolyte has advantages of better adhesion with electrodes, good mech. strength, better performance at low and high temps., better compatibility with organic electrolytes of a lithium secondary battery and it can be applied to the manufacture of lithium secondary batteries.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:314175 HCAPLUS
DOCUMENT NUMBER: 131:129924
TITLE: An efficient procedure for the synthesis of spiro[3H-indole-3,4'-(1'H)-pyrano[2,3-c]pyrrole]-5'-carbonitriles using solid inorganic supports and microwave activation
AUTHOR(S): Dandia, Anshu; Taneja, Harshita; Gupta, Rajive; Paul, Satya
CORPORATE SOURCE: Department of Chemistry, University of Rajasthan, Jaipur, 302 004, India
SOURCE: Synthetic Communications (1999), 29(13), 2323-2335

CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 131:129924
GI



I II

AB Microwave irradiation accelerates the Michael condensation of 3-dicyanomethylene-2H-indole-2-one I (X = H, Me, Cl) with 2-pyrrolidone/ **N-methyl-2-pyrrolidone** (i) adsorbed on neutral **alumina** in "dry media" and (ii) using absolute ethanol as energy transfer medium to give spiro compds. II (R = H, Me). 3-Dicyanomethylene-2H-indol-2-one was synthesized under microwave irradiation using indole-2,3-dione and malononitrile. The results were compared with those obtained following the classical **method.** The advantages obtained by the use of microwave irradiation are demonstrated.
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:618146 HCAPLUS
DOCUMENT NUMBER: 123:15942
TITLE: Manufacture of asymmetric ceramic membranes
INVENTOR(S): Adriansens, Walter; Doyen, Willy; Leysen, Roger; Brauns, Etienne
PATENT ASSIGNEE(S): "Vlaamse Instelling voor Technologisch Onderzoek", Afgekort :v.i.t.o.", onderneming, Belg.
SOURCE: Eur. Pat. Appl., 5 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 650759	A1	19950503	EP 1994-203000	19941015
R: AT, BE, DE, DK, ES, FR, GB, IT, NL, PT, SE				
BE 1008230	A3	19960220	BE 1993-1199	19931029
PRIORITY APPLN. INFO.:			BE 1993-1199 A	19931029

AB In this **method**, comprising coating a porous carrier with ceramic powder by wet process and heat-treating the material, a suspension of the ceramic powder and organic binder in a solvent is prepared in ceramic powder/binder weight ratio 1-99, the suspension is applied to the porous

carrier by film casting, the solvent removed by extraction with a nonsolvent, the binder removed thermally, and the material sintered. A porous Al2O3 carrier tube was coated with a dispersion of Al2O3 powder in Udel P 1800 NT11 (polysulfone) and **N-methyl-2-pyrrolidone** (solvent). Water was used as the nonsolvent.

L15 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:430145 HCAPLUS
DOCUMENT NUMBER: 119:30145
TITLE: Washing **method** for (oligo)polymer- and monomer-attached substrates
INVENTOR(S): Yada, Masato
PATENT ASSIGNEE(S): Seiko Epson Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04318036	A2	19921109	JP 1991-83752	19910416
JP 3189288	B2	20010716		
PRIORITY APPLN. INFO.:			JP 1991-83752	19910416

AB The title process comprises showering polymer- or monomer-attached substrates with aqueous solns., soaking in surfactant-containing solns., ultrasonically washing with aqueous solns. containing surfactants and soluble gas at a certain concentration, washing with water-organic solvent mixts., and drying. Thus, diethylene glycol bis(allyl carbonate) was polymerized to form a lens which was showered with 20 L/min H2O, soaked in 10% M-6000 (nonionic surfactant)-containing aqueous solution, ultrasonically washed with 1% M-6000- and 17-ppm O-containing aqueous solution, washed with methyl-2-pyrrolidone-H2 mixture, then with H2O at 60°, and dried to result a surface with 4 impurities/cm2 (by laser scattering **method**).

L15 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1988:593593 HCAPLUS
DOCUMENT NUMBER: 109:193593
TITLE: **Method** for removing basic nitrogen compounds from extracted oils by use of acidic polar adsorbents and the regeneration of said adsorbents
INVENTOR(S): Yao, Keith Chen
PATENT ASSIGNEE(S): Exxon Research and Engineering Co., USA
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 278694	A2	19880817	EP 1988-300982	19880205
EP 278694	A3	19891018		
EP 278694	B1	19920729		

R: DE, FR, GB, IT

US 4846962	A	19890711	US 1987-14271	19870212
CA 1323841	A1	19931102	CA 1988-556851	19880119
JP 63200804	A2	19880819	JP 1988-27839	19880210

PRIORITY APPLN. INFO.: US 1987-14271 A 19870212

AB Basic N compds. (BNC) are selectively removed from solvent extracted oils (e.g., transformer oils) by contacting the oil with a solid acidic adsorbent containing 20-30 weight% Al2O3; the adsorbent has a surface area of 50-700 m2/g and an average pore diameter of 10-200 Å. The adsorbent may addnl. contain F or <30 weight% water, and is regenerated by either purging with H at elevated temperature and pressure, or by washing BNC-saturated adsorbent with extraction process solvent, e.g., **N-methyl-2-pyrrolidone** (I). Extracted oil raffinate treated with the adsorbent to remove BNC exhibits superior uninhibited oxidation stability as compared to untreated conventional hydrofined oil. Thus, Western Canadian 150N stock, I-extracted lubricating oil (viscosity index 90, 0.17 weight% S, 51 ppm basic N) was treated in a batch system using the ketjen high Al base (3:1 SiO2-Al2O3 weight ratio) at 100-250° and 20:1 weight ratio oil-adsorbent mixture for 2 h, resulting in >98% BNC removal.

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	210.49	377.64

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-33.00	-33.00

STN INTERNATIONAL LOGOFF AT 09:47:22 ON 09 APR 2006